

IN THE CLAIMS

Please amend Claims 1, 23 and 24, as indicated and add new Claims 25 - 30.

1. (Amended) A chemical vapor deposition (CVD) process for depositing SiO₂ films on a substrate surface, said process comprising the steps of:

- (a) disposing the substrate within a chemical vapor deposition reaction chamber;
- (b) introducing a gas volume of SiO₂ precursors into said chamber;
- (c) admitting a gas volume of ozone into the chamber;
- (d) [exposing the volume of gases to] illuminating, with a source of high intensity light the volume of gas located within a chemically reactive distance of the substrate assembly surface, without illuminating the substrate assembly [to increase the atomic concentration of oxygen in the reactive gas volume].

23. (Amended) A chemical vapor deposition (CVD) process using ozone, for depositing films on a substrate assembly surface, said process comprising the steps of:

- a) disposing the substrate within a chemical vapor deposition reaction chamber;
- (b) introducing a gas volume of a preselected reaction precursor compound into said chamber;
- (c) admitting a gas volume of ozone into the chamber;
- (d) exposing [the volume of gases] to a source of high intensity light the volume of gas located within a chemically reactive distance of the substrate surface, without exposing the substrate assembly to the light source [to increase the atomic concentration of oxygen in the reactive gas volume].

24. (Amended) A chemical vapor deposition (CVD) process for depositing films on a substrate surface, said process comprising the steps of:

- a) disposing the substrate within a chemical vapor deposition reaction chamber;
- (b) introducing a gas volume of a first preselected reaction precursor compound into said chamber;
- (c) admitting a gas volume of at least a second preselected reaction precursor compound into said chamber;
- (d) [exposing the volume of gases to] optically exciting the volume of gas located within a chemically reactive distance of the substrate, without exposing the substrate assembly surface to the optical excitation [to increase the atomic concentration of oxygen in the reactive gas volume].

25.(New) A method to reduce fixed charge in CVD ozone deposited films on a substrate, the method comprising:

- (a) disposing a substrate within a chemical vapor deposition reaction chamber;
- (b) introducing a gas volume of SiO₂ precursors into said chamber;
- (c) admitting a gas volume of ozone into the chamber;
- (d) producing a film of the selected compound on a surface of the substrate, wherein said film has a low fixed charge.

26. (New) The method of Claim 25 wherein the producing step comprises illuminating, with a source of high intensity light, the volume of gas located within a chemically reactive distance of the substrate surface, without illuminating the substrate.

27. (New) An ozone-containing gas for a chemical vapor deposition process, the gas comprising:

a volume of gas that engages in homogeneous chemical reactions; and
a volume of gas that engages in heterogenous chemical reactions.

28. (New) The gas of Claim 27 wherein the heterogenous volume of gas is optically excited.

29. (New) The gas of Claim 28 wherein the optical excitation is supplied by a high intensity light source.

30. (New) A method of providing a chemical vapor deposition environment in a reaction chamber, the method comprising:

introducing a deposition gas into the chamber;
introducing ozone gas into the chamber; and
optically exciting gas located in a heterogeneous chemical reaction volume of the chamber.

REMARKS

Reconsideration of the application in view of the amendments and the following remarks is respectfully requested.

1. Claims 1 through 24 are pending in the application. Claims 1, 23 and 24 have been amended. New Claims 25 - 30 have been added.

A translation of the Hismune (JP 2-050966) reference has been provided for the Examiner, and is attached hereto and marked as "Exhibit A."